

D.P.U. 94-44

Petition of New York Cellular Geographic Service Area, Inc. for exemption of certain lands and structures to be used for transmission of telecommunications services from the operation of the zoning by-laws of the Town of Rehoboth.

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FOR: NEW YORK CELLULAR  
GEOGRAPHIC SERVICE AREA,  
INC.  
Petitioner

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## I. INTRODUCTION

On March 7, 1994, New York Cellular Geographic Service Area, Inc. ("NYNEX Mobile" or "Company") filed with the Department of Public Utilities ("Department") a petition for exemption from the zoning by-laws of the Town of Rehoboth. The filing was made pursuant to the provisions of G.L. c. 40A, § 3, which authorizes the Department to exempt public service corporations from local zoning ordinances or by-laws if the Department finds that the proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public. NYNEX Mobile seeks to construct and operate a 180-foot-high, free-standing communications tower and an associated service building on property located in Rehoboth. Antenna arrays on the tower would transmit radio signals to portable and mobile telephones in addition to NYNEX Mobile's other transmission arrays. NYNEX Mobile proposes to install and operate such equipment and structures on a 60' x 60' parcel of land owned by the Town of Rehoboth and located to the south of the Rehoboth town hall (Petition at 3, attached maps at 2).

The affected parcel of land, is located in a Residential/Agricultural District<sup>1</sup> as defined by the Town of Rehoboth Zoning By-law, which

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<sup>1</sup> The Residential/Agricultural District is the only district designation in the Rehoboth Zoning By-law that encompasses residential uses (Exh. DPU 1-1).

does not permit the uses proposed by the Company (Exh. DPU 1-1). During the development of the evidentiary record in this proceeding, NYNEX Mobile sought an exemption<sup>2</sup> from sections 4.0 and 4.1 of the Town's zoning by-law regarding restrictions and prohibitions on construction in a Residential/Agricultural district, and from section 6.7, requiring site plan approval (id.). In its final memorandum in support of the petition ("Company Brief"), the Company sought an exemption from two additional sections of the Town's zoning by-law, specifically section 5.0 which restricts the number of structures on a non-conforming lot and section 5.1 which sets minimum requirements in a Residential/Agricultural District (Company Brief at n.1).

## II. PROCEDURAL HISTORY

After due notice, the Department held a public hearing in Rehoboth on June 28, 1994, to receive public comments on the Company's petition. Richard Berg, real estate manager for NYNEX Mobile, and Robert Kelly, manager of radio frequency design for NYNEX Mobile, presented a summary of the petition. Area residents raised concerns regarding health effects, visual impacts, diminished

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<sup>2</sup> The Department notes that the Town of Rehoboth Zoning By-law prohibits the granting of use variances, therefore, petitioning the Department for an exemption from the by-law is the only option NYNEX Mobile could take to enable the Company to construct it's facilities at this location.

property values, quality of life issues, increasing the capacity of the proposed tower, and the possibility of selecting an alternative site (Tr. 1, at 25, 26, 33, 37, 38, 42-46, 54, 55).<sup>3</sup>

A petition for leave to intervene was filed by Kilian and Michael Sullivan-Silva ("the Sullivan-Silvas").<sup>4</sup> The Department granted the petition. An evidentiary hearing was held at the Department's offices on October 31, 1994. In support of its petition, the Company sponsored the testimony of Richard Berg and Robert Kelly. The Hearing Officer entered 33 exhibits into the record, consisting of responses to information and record requests. The Company entered 7 exhibits in addition to their petition and Department requested site maps into the record. The Sullivan-Silva's entered 1 exhibit into the record. The Company Brief was filed on November 14, 1994.

### III. STANDARD OF REVIEW

In its petition for a zoning exemption, the Company seeks approval under G.L.

c. 40A, § 3, which in pertinent part, provides:

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<sup>3</sup> The transcripts in this case have been designated Tr. 1 for the June 28, 1994 public hearing, and Tr. 2 for the October 31, 1994 evidentiary hearing, respectively.

<sup>4</sup> The Department notes that the closest residence to the site is the Sullivan-Silva residence, located approximately 1,248 feet from the proposed facility (Exh. DPU 1-8).

Lands or structures used, or to be used by a public service corporation may be exempted in particular respects from the operation of a zoning ordinance or by-law if, upon petition of the corporation, the [D]epartment of [P]ublic [U]tilities shall, after notice given pursuant to section eleven and public hearing in the town or city, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public...

Under this section, the Company first must qualify as a public service corporation (see Save the Bay, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975)), and establish that it requires an exemption from the local zoning ordinance or by-laws. The Company then must demonstrate that the present or proposed use of the land or structure is reasonably necessary for the public convenience or welfare.

In determining whether a company qualifies as a "public service corporation" for purposes of G.L. c. 40A, § 3, the Supreme Judicial Court has stated:

among the pertinent considerations are whether the corporation is organized pursuant to an appropriate franchise from the State to provide for a necessity or convenience to the general public which could not be furnished through the ordinary channels of private business; whether the corporation is subject to the requisite degree of governmental control and regulation; and the nature of the public benefit to be derived from the service provided.

Save the Bay, *supra*, at 680.

In determining whether the present or proposed use is reasonably necessary for the public convenience or welfare, the Department must balance the interests of the general public against the local interest.

Id., at 685-686; Town of Truro v. Department of Public Utilities, 365 Mass. 407 (1974). Specifically, the Department is empowered and required to undertake "a broad and balanced consideration of all aspects of the general public interest and welfare and not merely [make an] examination of the local and individual interests which might be affected." New York Central Railroad v. Department of Public Utilities, 347 Mass. 586, 592 (1964). When reviewing a petition for a zoning exemption under G.L. c. 40A, § 3, the Department is empowered and required to consider the public effects of the requested exemption in the State as a whole and upon the territory served by the applicant. Save the Bay, supra, at 685; New York Central Railroad, supra, at 592.

With respect to the particular site chosen by a petitioner, G.L. c. 40A, § 3 does not require the petitioner to demonstrate that its preferred site is the best possible alternative, nor does the statute require the Department to consider and reject every possible alternative site presented. Martarano v. Department of Public Utilities, 401 Mass. 257, 265 (1987); New York Central Railroad, supra, at 591; Wenham v. Department of Public Utilities, 333 Mass. 15, 17 (1955). Rather, the availability of alternative sites, the efforts necessary to secure them, and the relative advantages and disadvantages of those sites are matters of fact bearing solely upon the main issue of whether the

preferred site is reasonably necessary for the convenience or welfare of the public. Id.

Therefore, when making a determination as to whether a petitioner's present or proposed use is reasonably necessary for the public convenience or welfare, the Department examines: (1) the present or proposed use and any alternatives or alternative sites identified; (2) the need for, or public benefits of, the present or proposed use; and (3) the environmental impacts or any other impacts of the present or proposed use. See New York Cellular Geographic Service Area, Inc., D.P.U. 93-206, at 19-22 (1994); New England Power Company, D.P.U. 92-255, at 17-18; Tennessee Gas Pipeline Company, D.P.U. 85-207, at 20-25 (1986).

After examining these three issues, the Department balances the interests of the general public against the local interest, and determines whether the present or proposed use is reasonably necessary for the convenience or welfare of the public.

In addition, the Massachusetts Environmental Policy Act ("MEPA") provides that "[a]ny determination made by an agency of the commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact." G.L. c. 30, § 61. Pursuant to 301 C.M.R. 11.01(3), these findings are necessary when an



Environmental Impact Report ("EIR") is submitted by the company to the Secretary of Environmental Affairs, and should be based on such EIR. When an EIR is not required, c. 30, § 61 findings are not necessary. 301 C.M.R. 11.01(3).<sup>5</sup>

#### IV. DESCRIPTION OF THE COMPANY'S PROPOSAL

##### A. The Need for the Tower Facility

Mr. Kelly stated that a typical cellular radio transmission station ("cell site") consists of two types of radio technologies, cellular and microwave (Tr. 2, at 3). He explained that the cellular technology provides a communication link between a cell site antenna and the cellular phone in the field, while microwave technology provides a communication link between different cell sites (id. at 28). Mr. Kelly described the cellular network as a low-powered technology based on reusing frequencies, where the individual cell sites provide coverage for a distance of approximately two to three miles in each direction (Tr. 2, at 5). He testified that the goal of the Company is "to build a ubiquitous network of continuous service" (id. at 79).

The Company asserted that presently there exists a "service hole" in the Rehoboth area due to the distance between existing NYNEX

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<sup>5</sup> The record indicates that no EIR was required for the proposed project (Exh. DPU 1-5).

Mobile cell sites in the area (Exh. DPU 1-4). Mr. Berg testified that Rehoboth is now serviced by a combination of scattered signals from surrounding cell sites, and that the nearest existing cell site to Rehoboth is the Attleboro cell site, which is located approximately 6.7 miles away (Tr. 2, at 29). The Company identified the target service area for the proposed cell site as Routes 44, 118, and 140 in the area of Rehoboth and West Taunton (Exh. DPU 2-8). The Company indicated that the proposed Rehoboth site would be linked by microwave communications to the Attleboro cell site, which is one of the two microwave hubs for Bristol County (Exh. DPU 2-7).

NYNEX Mobile explained that a minimum signal strength is required to provide satisfactory coverage at a given location (Exh. DPU 2-8).<sup>6</sup> NYNEX Mobile stated that signal strengths below the required level result in calls that are scratchy, soft and with interference, and in calls that could be dropped while in progress (id.). The Company provided computer generated maps which indicated that large portions of the Rehoboth area are currently below satisfactory signal strength levels (id.). Mr. Berg testified that there is not enough signal strength from any of the sites in the surrounding towns to properly cover the

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<sup>6</sup> NYNEX Mobile considers signal strength levels greater than -80 decibels ("dBm") to be satisfactory to serve both hand-held and car phone systems (Exh. DPU 2-8).

service area (Tr. 2, at 12). He stated that presently customers traveling through the Rehoboth area either lose their calls, cannot hear the other party on the line, or experience static communication (id. at 14). The Company further indicated that it has received complaints from customers concerning the poor quality of service in the Rehoboth area (id. at 34).

B. The Proposed Project and Alternatives

NYNEX Mobile proposes to construct its 180-foot cellular radio transmitting tower on property owned by the Town of Rehoboth (Petition at 3). NYNEX Mobile stated that in addition to the tower, the Company would be constructing a 12' x 26' x 10' prefabricated service building on the property (Tr. 2, at 19, 52; Company Brief at 1). NYNEX Mobile has entered into a five-year lease agreement with the Town of Rehoboth for that portion of the property on which the tower and service building will be constructed (Exh. DPU 1-15). The Company stated that the tower typically operates at 100 watts per channel (Tr. 2, at 73). The Company explained that it is limited by the Federal Communications Commission ("FCC") to 500 watts per channel, and contrasted its output to a typical AM/FM station which operates at 50,000 to 100,000 watts of power (id.).

The tower would be a self-supported, three-legged open-lattice design, with twelve cellular radio antennas, four for each of three

sectors, and up to two microwave antennas as noted above, for communication between cell sites (Tr. 2, at 19). The Company stated that it selected the open-lattice design as opposed to a monopole design, because the open-lattice design is more structurally sound and would be able to handle the Company's and the Town's communication equipment (id., at 69).<sup>7</sup> NYNEX Mobile stated that it intends to install underground utility lines to serve the facility, as requested by the Town of Rehoboth (Exh. DPU 2-12).

In order to select a site for the proposed facility the Company stated that it first analyzed computer simulations of existing coverage (Exh. DPU 1-3; Tr. 1, at 15, 16). The Company then reviewed topographic maps, town and assessors maps, and zoning by-laws, and then conducted field inspections to identify a number of sites (id.). The Company reported that it considered numerous alternative sites prior to selecting the proposed site (Exh. DPU 1-3). NYNEX Mobile stated that it conducted tests of signal strength for eleven alternative sites<sup>8</sup>

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<sup>7</sup> The Company has offered Rehoboth the use of the proposed tower for town safety communication equipment at no charge (Exh. DPU 1-16; Tr. 2, at 40).

<sup>8</sup> The Company included four existing towers in and around Rehoboth as potential sites (Exh. DPU 1-3).

which all showed poor results<sup>9</sup>

due to the combination of elevation and distance, and, therefore, would not provide the needed coverage (id.; Tr. 2, at 31-33).

The Company stated that the proposed site is advantageous due to its topographic elevation and central location in the service area (Exh. DPU 1-13). The Company asserted that the proposed site is close to perfect for providing needed increases in signal strength in the area that NYNEX Mobile has targeted (Tr. 2, at 81, 104). Further, the Company noted that the Town was willing to make the parcel available to the Company for the proposed project (Exh. DPU 1-3).<sup>10</sup>

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<sup>9</sup> The signal strength test for a new tower consists of placing a 150 to 180-foot crane with an antenna at the identified sites and conducting a radio test at various distances from the site (Tr. 1, at 16).

<sup>10</sup> The Town of Rehoboth has submitted a letter of support to the Department regarding the proposed project (Exh. DPU 1-17B).

The Company stated that increasing power at one of the surrounding existing sites would not be an alternative to constructing a new facility (Exh. DPU 2-6). NYNEX Mobile explained that while increasing the power at an existing site would potentially increase signal coverage in the target area, it also would increase the likelihood of interference with other cell sites (id.).

C. Impacts of the Proposed Project

In accordance with its responsibility to undertake a broad and balanced consideration of the general public interest and welfare, the Department examines the impacts associated with the proposed project to identify any significant impacts which would likely occur during construction and operation of the proposed project.

1. Safety

To secure the site against unauthorized entry, NYNEX Mobile stated it would enclose the tower area by erecting an eight-foot-high, heavy duty, chain link fence topped with barbed wire (Exh. DPU 1-17; Tr. 2, at 17). According to Mr. Kelly, the fence would be of a small link design, to reduce the risk of climbing (Tr. 2, at 101). In addition, the Company stated that the site would be equipped with alarms that operate continuously to detect intruders (Exh. DPU 1-17).

Mr. Berg testified that inspections and preventive maintenance would be conducted every four to six weeks (Tr. 2, at 26). He

explained that as part of such inspections, technical and diagnostic testing is performed on the equipment, as well as a visual inspection of the inside and outside of the building and the tower (id. at 50-51). The Company indicated that the radio and microwave equipment is monitored 24-hours a day via its operations center, located in Woburn where personnel are on-duty 24 hours a day to undertake appropriate response action including the dispatching of a technician to the site (id. at 20, 25, 26).

The Company stated that it is not possible for unauthorized persons to get close to the actual antenna (id. at 103). NYNEX Mobile further asserted that if someone were to gain entrance inside the fenced area, there would be no health hazard as the antennas are not pointed toward the ground (id.). The Company explained that the only possibility of an intruder being exposed to radiation at a frequency above regulatory limits would be if the intruder could scale the tower and be suspended in mid-air in front of the antenna (Exh. DPU 2-15). Finally, NYNEX Mobile reported that there have been no known cases of injury to trespassers at any of its cell site facilities (id.).

The Company asserted that the tower construction can withstand wind, snow and ice and that there have been no structural failures at any of the 500 NYNEX Mobile cell sites (Tr. 2, at 21).

## 2. Visual

Residents raised concerns about the strong visual presence of the tower and the impact on the rural character of the area (Tr. 1, at 42). Mr. Berg stated that the Company conducted a visual study based on a number of vantage points selected by the Town (Tr. 2, at 60). He explained that to carry out the visual study an 180-foot crane was placed at the location on the town-owned lot originally considered for placement of the tower,<sup>11</sup> and photographs were taken from various locations identified by the Town towards the direction of the site (id. at 62). The Company stated that the results of the study showed that the site will be visible from only one location, at a distance of approximately one-half mile, near Brittany Farm (Exh. DPU 2-14; Tr. 2, at 61, 64). Mr. Berg further indicated that the tower would not be visible from either the front or back yards of the Sullivan-Silva property (id. at 63).

The Company stated that the proposed site is located in a wooded area, and therefore, that no screening or landscaping is proposed (Exh. DPU 1-12). Mr. Berg explained that because the tower would be located

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<sup>11</sup> The Company stated that it moved the proposed location of the tower approximately 225 feet to a more wooded area of the town-owned land in response to a request by the Town (Exh. DPU 1-6E; Tr. 2, at 43). The visual impacts study was conducted for the originally identified location (id. at 62).



further into the woods than the originally identified location, its visual impact would be less than shown in the visual study (Tr. 2, at 68-69). NYNEX Mobile stated that the tower will remain unpainted galvanized steel which will weather to a sky grey color (Exh. DPU 2-14). The Company indicated that the tower will not be lighted, noting that lighting is not required at that location for a tower less than 200 feet in height (Tr. 2, at 68).

### 3. Health

Questions were raised at the public hearing about the possible health risks from radiation emissions, especially the long-term health effects from a newer technology (Tr. 1, at 43-45). Mr. Kelly stated that cellular communications, which operates in the 800-megahertz ("mgh") range, has been in use for ten years, however, he noted that the frequencies have been used for approximately 40 to 50 years as UHF television broadcast frequencies (Tr. 2, at 73).

NYNEX Mobile reported that there are two radio frequency guidelines that the Company applies to its facilities -- that of the American National Standards Institute<sup>12</sup> ("ANSI") and that of the

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<sup>12</sup> ANSI addresses the safety levels with respect to human exposure to radio frequency electromagnetic fields, from 3 kilohertz ("kHz") to 300 gigahertz ("GHz") (Exh. DPU 1-6A). The Company stated that the ANSI limit is tied to the specific absorption rate ("SAR"), which is the amount of emissions that could be absorbed by the  
(continued...)

Commonwealth of Massachusetts Department of Public Health ("MDPH") Radio Frequency Exposure Limits<sup>13</sup> ("RFEL") (Exh. DPU-1-6A). Both of these guidelines apply to the same exposure limits (id.).<sup>14</sup> Donald Haes, a consulting health physicist, conducted a study for NYNEX Mobile that measured the predicted power density levels generated by the proposed facility ("Haes Report") (id.; Tr. 2, at 76). Mr. Kelly explained that power density is the energy that would be transmitted from the antennas at various distances from the tower (id.).

The Company asserted that based on the Haes Report, the proposed facility will generate a maximum power density of only .000338 mW/cm<sup>2</sup> or .058 percent of the current MDPH RFEL (Exh. DPU

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<sup>12</sup>(...continued)

body (Tr. 2, at 96). NYNEX Mobile explained that ANSI distills all of the information and existing literature available concerning cellular technology, and it determines a level which is the lowest possible detectible SAR, finally they take a fraction of that level to arrive at a safe level where there could not be any health effects (id. at 96, 99).

<sup>13</sup> The MDPH limits address fixed facilities which generate electromagnetic fields in the frequency range of 300 kHz to 100 GHz and microwave ovens (Exh. DPU 1-6A).

<sup>14</sup> The Company indicated that the MDPH RFEL for public exposure is (1) 0.587 milliwatt per square centimeter ("mW/cm<sup>2</sup>") for the cellular phone frequency, and (2) 1.0 mW/cm<sup>2</sup> for the microwave frequency (Exhs. DPU 1-6A; DPU 1-6D).

2-3).<sup>15</sup> The Company indicated that this level would occur at a distance of 250 feet from the tower (id.). NYNEX Mobile explained that its power density estimates were based on a conservative, worst case assumption whereby the facility is operating at 100 percent use, utilizing all 45<sup>16</sup> channels simultaneously in one direction, at 100 watts per channel (Exh. DPU 1-6A). Mr. Kelly stated that based on the actual design of the proposed cell site, the channels would be divided among three directional sectors, and that, therefore, the highest use in any one direction would be 30 to 40 percent of all the radios on at one time (Tr. 2, at 78). However, the Company noted that the Haes Report recommended that public access on the tower should be restricted to no

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<sup>15</sup> NYNEX Mobile provided separate calculations of the ground level exposure levels for cellular radio frequency radiation emissions at the base of the tower, as well as at the nearest point on the property line and at the closest location potentially occupied by the public, for submission to the Department of Labor and Industries ("MDLI") and the MDPH (Exh. DPU 1-6A). The Company's submission to MDLI and MDPH indicated a maximum exposure level of 0.0513 mW/cm<sup>2</sup> (id.). The Company indicated that the Haes Report predicted maximum exposure levels lower than those calculated by NYNEX Mobile as the Company's calculations were based on directing the antennas downward towards the base of the tower (id. at 8). The Haes Report indicated that because it considered that assumption overly conservative, its calculations were based on directing the antennas toward the horizon (id.).

<sup>16</sup> The Company stated that although the maximum frequency is 45 channels, with 15 in each sector, NYNEX Mobile's initial frequency plan is for 40 channels (Exh. DPU 2-4).

nearer than 30 feet from in front of the antennas, at antenna height, in order to prevent exposure to radio frequency emissions possibly in excess of MDPH limits (Exh. DPU 1-6A at 8).

In regard to microwave emissions, the Company indicated that there is virtually no microwave energy present at ground level, as the microwave beam is transmitted from point to point on neighboring towers (Exh. DPU 1-6D; Tr. 2, at 85). The Company asserted that based on the Haes Report, the proposed facility will generate a maximum expected microwave exposure of only .0102 mW/cm<sup>2</sup> or 1.02 percent of the current MDPH RFEL for microwave based on worst case assumptions (Exh. DPU 1-10; Tr. 2, at 77).

The Company stated that it received approval for the proposed facility from the MDPH in May, 1993 (Tr. 2, at 103). Finally, the Company stated that it does not anticipate increasing the power of the proposed facility (id. at 94).

The Sullivan-Silvas provided the Department with numerous articles from periodicals as to the potential health impacts from electromagnetic field ("EMF") radiation and from the use of, in particular, compact cellular telephones. The Department notes, however, that none of these articles addresses the impacts associated with the much lower levels of radiation or greater distances from the

radiation source(s) that are involved in the operation of a cellular tower.

4. Other

The Company stated that the construction of the facilities would take approximately six to eight weeks, but noted that the construction would be intermittent (Exh. DPU 1-11; Tr. 2, at 44-45). The Company also indicated that by utilizing prefabricated construction for the service building, the amount of construction activity at the site would be minimized (Tr. 2, at 52). NYNEX Mobile indicated that construction traffic would not cause any traffic disruption and would not interrupt activities at town hall (id. at 45; Exh. DPU 1-11).

Further, the Company stated that once the facility is completed, there would only be one vehicle trip to the cell site every four to six weeks (Exh. DPU 1-11).

NYNEX Mobile stated that it was not aware of any instances of diminished property values due to the placement of cellular technology (Tr. 2, at 47-48). The Company provided a study undertaken by Bonz & Co., a real estate counseling and valuation firm, that analyzed the likely impact of a new tower on property values in Sturbridge, Massachusetts (RR-DPU-1). The study concluded that the location of a tower had no appreciable effect upon trends in the market value of homes in the area (id.).

V. ANALYSIS AND FINDINGS

G.L. c. 40A, § 3, authorizes the Department to grant to public service corporations exemptions from local zoning ordinances or by-laws if the Department determines that the exemption is required and finds that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public. NYNEX Mobile satisfies the statutory definition of a public service corporation as a result of its having been licensed by the FCC and granted a certificate of public convenience and necessity ("certificate") by the Department to construct and operate a cellular mobile telephone service. Boston Cellular Geographic Service Area, Inc., D.P.U. 1565/84-21, at 2, 14 (1984); New York Cellular Geographic Service Area, Inc., D.P.U. 87-224 (1984). In Boston Cellular Geographic Service Area, Inc., D.P.U. 1565/84-21 (1984), the Department found that the FCC had found an immediate public need for cellular radio, and, in granting Boston Cellular Geographic Service Area, Inc. the certificate, the Department concurred that such a need exists. Id. at 4.

The Department previously has found that its specific regulation of a company's rates, rules, and practices qualifies such a company as a public service corporation under G.L. c. 40A, § 3. See American Telephone and Telegraph Company, D.P.U. 1336 (1983); American Telephone and Telegraph Company, D.P.U. 1245 (1983). Prior to

August, 1994, the Department had regulated radio common carrier operations, rates, terms and conditions under G.L. c. 159 and 220 C.M.R. §§ 35.00 et seq.

On August 10, 1993, however, the President of the United States signed the Omnibus Budget Reconciliation Act (Pub. L. No. 103-66) into law, which amended the Federal Communications Act of 1934 by preempting state and local entry and rate regulation of both commercial and private mobile radio services ("CMRS"). Due to a grandfather clause in the Federal law, the preemption became effective in Massachusetts on August 10, 1994. Under the new law, states may continue to regulate other terms and conditions of CMRS companies, and may continue to regulate rates of CMRS companies if the FCC approves a state's petition to continue rate regulation. By Order on August 5, 1994, the Department decided not to petition the FCC for authority to continue rate regulation, nor regulation of other terms and conditions, of radio common carriers, based on the competitiveness of the radio common carrier industry in Massachusetts. Regulations of Commercial Mobile Radio Services, D.P.U. 94-73 (1994). In addition, the Department has repealed 220 C.M.R. §§ 35.00 et seq. Id.

Though the Department no longer regulates the rates, terms or conditions of radio common carriers in Massachusetts, the Department has previously determined that NYNEX Mobile is a public service

corporation. New York Service Geographic Area, Inc., D.P.U. 90-12 (1990). Moreover, NYNEX Mobile is subject to regulation and control by the FCC. The Department, therefore, finds that NYNEX Mobile is subject to the requisite degree of governmental control and regulation required under the definition of a public service corporation. Thus, NYNEX Mobile qualifies as a public service corporation under the Court's directive in Save the Bay, and is, therefore, entitled to seek the requested exemption from sections of the zoning by-law of the Town of Rehoboth.

As discussed, supra, the Company's petition seeks exemption from specific zoning by-laws of the Town of Rehoboth. Based on its review of the zoning by-laws, the Department concludes that Sections 4.0, 4.1, and 6.7 of the by-laws could impede construction and implementation of the Company's proposed cellular telecommunications facility construction. Therefore, the Department finds that the Company's proposed construction would require exemptions from Sections 4.0, 4.1, and 6.7 of the Town of Rehoboth Zoning By-laws.

As noted above, the Company, in its brief, also requested the Department to grant exemptions from Sections 5.0 and 5.1 of the Town's zoning by-laws and relief from any other provisions that could impede construction. The Department understands that as an initial matter petitioners may not always be familiar with which sections of a



zoning by-law or ordinance may provide an obstacle to its proposed action. However, it is the Company's obligation to become familiar with the by-law or ordinance and to timely identify those sections to the Department.

In the present case, NYNEX Mobile failed to make such an identification in its initial filing and failed again to do so in response to a specific Department information request. By raising the issue in its brief, NYNEX Mobile has prevented the Department from any meaningful opportunity to fully investigate the need for such exemptions. The Company is both in a better position to identify its needs, and has the responsibility to fully plead its own case. Under G.L. c. 40A, § 3, the Department is authorized to grant only those exemptions that it determines are needed. The Department fully expects that, henceforth, all public service corporations seeking exemptions under c. 40A, § 3 will identify fully and in a timely manner all exemptions that are necessary for the corporation to proceed with its proposed activities so that the Department is provided ample opportunity to investigate the need for the requested exemptions.

In regard to the Company's request for exemptions from Sections 5.0 and 5.1 of the zoning by-law, the Department is unclear as to whether either section would impede NYNEX Mobile's proposed facility. For example, although clearly the parcel that NYNEX Mobile will be

leasing from the Town fails to meet the minimum lot dimension and may fail to meet the minimum frontage as required by Section 5.1, the parcel is part of a much larger piece of land owned by the Town that arguably does meet these standards. Further, it is unclear whether Section 5.0's restriction to one principle structure on a lot applies to a lot with a communication tower and an associated service building anymore than it would to a lot with a residence and a detached garage. Nevertheless, as the Town of Rehoboth has indicated that it supports the installation of the proposed NYNEX Mobile cell site, and, therefore, presumably is not concerned about an exemption from these two sections of its zoning by-law in this proceeding, the Department here finds that the Company's proposed construction might require exemptions from Sections 5.0 and 5.1 of the Town of Rehoboth Zoning By-laws.

Having found that NYNEX Mobile meets the appropriate criteria of a public service corporation, the Department examines whether the proposed use of the land and structures set forth in its petition is reasonably necessary for the convenience or welfare of the public. With respect to the need for, and the public benefits of, the proposed facility, the Department previously has determined that the construction of NYNEX Mobile's radio system is in the public interest. See Boston Cellular Geographic Service Area, Inc., D.P.U. 1565/84-21 (1984). The

record demonstrates that the NYNEX Mobile cellular network is not satisfactory to meet customers needs within large portions of Rehoboth, including sections of Routes 44, 118, and 140. After consideration of alternative sites, NYNEX Mobile concluded that operation of the proposed facilities at the proposed site would provide the required service. The record here indicates that the proposed construction of the telecommunications facilities will significantly improve NYNEX Mobile's ability to provide adequate service to customers in the Rehoboth area including sections of Routes 44, 118, and 140.

The record further indicates that the Company has considered possible environmental and land use impacts of the proposed Rehoboth facility that may be of concern to the surrounding community, including issues of visual impact, safety, and traffic. To that extent, the Company: (1) would site the facility on a wooded parcel; (2) would install underground utilities; (3) would secure the site against unauthorized entry; and (4) would minimize construction traffic through use of a prefabricated service building.

With respect to public health impacts, the Company conducted a detailed analysis of radio frequencies and microwave emissions indicating no adverse effects. The record in this proceeding demonstrates that the RF emission exposure levels due to the operation

at maximum power output of the proposed facilities would be significantly less than the maximum allowable exposure levels. The Sullivan-Silvas provided the Department with additional information relative to the potential health impacts from EMF radiation and the use of compact cellular telephones. In regard to this information, the Department notes that although the information provided raises the issue of potential health risks from long-term exposure to EMF radiation and fields associated with the use of compact cellular telephones, this information does not provide any support for the premise that the health risks associated with a telecommunications tower are comparable, and does not refute the other record evidence that the proposed tower complies with all existing standards, which have been established to protect public health. Accordingly, the Department can find no record evidence to support a finding that the proposed NYNEX Mobile tower would have any negative public health impacts.

The Department finds that the general public interest in constructing a telecommunication tower and related service building to provide cellular phone service to the Rehoboth area, including sections of Routes 44, 118 and 140, outweighs the minimal impacts of the Company's proposed project on the local community. Accordingly, the Department finds, pursuant to G.L. c. 40A, § 3, that the proposed

telecommunication tower and related service building, are reasonably necessary for the convenience or welfare of the public.

VI. ORDER

Accordingly, after due notice, hearing and consideration, it is hereby ORDERED: That the proposed 180-foot high telecommunications tower and associated service building, as described in the Company's petition and exhibits, are necessary for the purposes alleged by the Company, and will serve the public convenience and are consistent with the public interest pursuant to G.L. c. 164, § 72; and it is

FURTHER ORDERED: That the Company's petitions be allowed and that the proposed construction and related facilities, as described in the Company's exhibits on file with the Department, be exempt from the operation of the following sections of the zoning ordinance of the Town of Rehoboth, pursuant to G.L. c. 40A, § 3, to the extent that the construction and related facilities are used for the transmission of telecommunications services: Sections 4.0, 4.1, 5.0, 5.1, and 6.7 of the Town of Rehoboth Zoning By-laws.

FURTHER ORDERED: That the Company shall obtain all governmental approvals necessary for this project before its construction commences; and it is

**FURTHER ORDERED:** That the Secretary of the Department shall transmit a certified copy of this Order to the Town Clerk of the Town of Rehoboth; and that NYNEX Mobile shall serve a copy of this Order upon the Board of Selectmen, Planning Board, and Conservation Commission of the Town of Rehoboth within five business days of its issuance and shall certify to the Secretary of the Department within ten business days of its issuance that such service has been accomplished.

By Order of the Department,

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Kenneth Gordon, Chairman

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Mary Clark Webster,

Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).